

REMARKS

STATUS OF CLAIMS

Claim 27 has been canceled, and Claims 22-26 and 28-29 have been amended. Claims 32-33 have been added, and Claims 30-31 remain in the application unchanged. Claims 22-26 and 28-33 are pending in the application. The claim amendments do not necessitate the payment of any additional filing fee. Applicants respectfully request reconsideration of this application in light of the above amendments and the following remarks.

FILING DATE OF APPLICANTS' LAST RESPONSE

A prior Office Action was mailed on December 16, 2003. Applicants filed a Response to that Office Action by Express Mail on May 21, 2004. Applicants are enclosing a copy of an acknowledgement post card bearing the date stamp of the PTO mailroom, showing that the prior Response was in fact received by the PTO on May 21, 2004. After that prior Response was filed, it was somehow lost within the PTO, and the PTO requested that Applicants provide an extra copy of the Response. Accordingly, on August 3, 2004, Applicants submitted a courtesy copy of the lost Response by facsimile. This was not a new filing, but merely provided the PTO with a replacement copy of a previously-filed document that had been lost within the PTO.

Subsequently, on November 3, 2004, the PTO issued the currently pending Office Action. This Office Action incorrectly shows the filing date of Applicants' last Response as August 3, 2004. Applicants respectfully request that the Examiner update the PTO records to correctly reflect that the prior Response was filed on May 21, 2004, and not on August 3, 2004.

ALLOWABLE SUBJECT MATTER

With reference to the present Office Action, Applicants note with appreciation the indication on page 6 that Claims 24 and 29-30 have been allowed. It is noted that these allowed claims are subject to a rejection for indefiniteness under the second paragraph of §112. As discussed below, Claims 24 and 29 have been amended in a manner that

should bring Claims 24 and 29-30 into compliance with the second paragraph of §112. Consequently, it is believed that all issues have been resolved in regard to Claims 24 and 29-30.

New dependent Claim 32 depends from allowed Claim 24, and is also believed to be allowable, for example for the same reasons as Claim 24.

SECOND PARAGRAPH OF 35 U.S.C. §112

The Office Action rejected Claims 22-26 and 28-31 under the second paragraph of 35 U.S.C. §112 as indefinite, identifying selected phrases that were considered to be indefinite. The foregoing amendments implement changes that are intended to cure each ground of rejection raised in the Office Action. Consequently, it is respectfully submitted that Claims 22-26 and 28-31 are all now in full compliance with the second paragraph of §112.

PATENTABILITY OF INDEPENDENT CLAIMS 22 AND 25

Independent Claims 22 and 25 have each been rejected under 35 U.S.C. §102 as anticipated by Forrest US Patent No. 4,659,678. However, these grounds of rejection are each respectfully traversed, for the following reasons. The PTO specifies in MPEP §2131 that, to anticipate a claim, a reference must teach every element of the claim. In the present application, Claim 22 has limitations that recite:

pouring remote-acting bodies which can be
positionally manipulated by a remote force, micro-
substances including a target substance of an assay, and
carriers having surfaces with a plurality of holes, cavities,
concavities or convexities that are sized to be capable of
holding the micro-substances and the remote-acting bodies,
into a liquid or a gas in accordance with a predetermined
order,

making the remote-acting bodies and the micro-substances be independently held in the holes, cavities, concavities or convexities in the surfaces of the carriers by simultaneously agitating the remote-acting bodies, the micro-substances, the carriers and the liquid or gas, . . .

Claim 25 has limitations that recite:

pouring remote-acting bodies which can be positionally manipulated by a remote force, micro-substances including a target substance of an assay, and carriers having surfaces with a plurality of holes, cavities, concavities or convexities that are sized to be capable of holding the micro-substances and the remote-acting bodies, into a ~~liquid~~, liquid or a gas in accordance with a predetermined order,

making the remote-acting bodies and the micro-substances be independently held in the holes, cavities, concavities or convexities in the surfaces of the carriers by simultaneously agitating the remote-acting bodies, the micro-substances, the carriers and the liquid or gas, . . .

As recognized on pages 4-5 of the Office Action, Forrest teaches that micro-substances are coupled to magnetic particles, and in particular that this is effected through covalent coupling. In contrast, Claim 22 and 25 each recite "making the remote-acting bodies and the micro-substances be independently held in the holes, cavities, concavities or convexities in the surfaces of the carriers". In other words, the micro-substances are held to the carrier, and in a manner other than covalently.

In addition, Forrest explains at lines 22-26 in column 8 that "The magnetisable cellulose particles were a composite of cellulose containing approximately 50% black

ferric(ous) oxide (Fe_3O_4), with mean particle diameter of 3 micron (see Forrest and Rattle, 'Magnetic Particle Radio immunoassay', in Immunoassays for Clinical Chemistry, p. 147-162, Ed. Hunter and Corrie, Churchill Livingstone, Edinburgh (1983)). In other words, the carriers (cellulose) of Forrest already contain the magnetic bodies (ferric oxide), before they are ever exposed to any micro-substances. In contrast, Claims 22 and 25 each recite: "making the remote-acting bodies and the micro-substances be independently held in the holes, cavities, concavities or convexities in the surfaces of the carriers by simultaneously agitating the remote-acting bodies, the micro-substances, the carriers and the liquid or gas". Thus, a single agitating step is used to cause both the remote-acting bodies and the micro-substances to be held to the carriers, which is a more efficient and cost-effective approach than that in Forrest.

To support the rejection of Claims 22 and 25 under §102, the Forrest patent must disclose each and every element recited in each of these claims. It is respectfully submitted that the Forrest patent fails to do so. Forrest therefore does not anticipate either Claim 22 or Claim 25 under §102. Claims 22 and 25 are thus believed to be allowable, and notice to that effect is respectfully requested.

DEPENDENT CLAIM 33

Dependent Claim 33 is a new claim that includes a recitation of:

configuring the carriers so that the holes, cavities, concavities or convexities are large enough to allow the magnetic particles to undergo orientation therein in response to the magnetic field.

Forrest does not appear to include any specific discussion of providing a carrier with holes or cavities that are sized sufficiently large so that magnetic particles therein can undergo orientation in response to a magnetic field. Accordingly, Claim 33 is believed to be patentably distinct from Forrest.

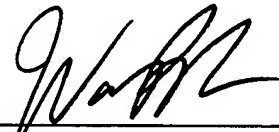
OTHER DEPENDENT CLAIMS

Claim 23 and Claims 26, 28 and 31 respectively depend from Claim 22 and Claim 25, and are also believed to be allowable, for example for the same reasons discussed above with respect to Claims 22 and 25, respectively.

CONCLUSION

Claims 22-26 and 28-33 are under consideration in the present application. In view of the foregoing amendments and remarks, allowance of all pending claims is respectfully requested. The Examiner is invited to call the undersigned at the below-listed telephone number if, in the opinion of the Examiner, such a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,



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